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NOTICE OF ALLOWANCE AND FEE(S) DUE

46169 7590 12/23/2010
SHOOK, HARDY & BACON L.L.P.
(Cerner Corporation)
Intellectual Property Department
2555 GRAND BOULEVARD
KANSAS CITY, MO 64108-2613

EXAMINER

LAM, ELIZA ANNE

ART UNIT

PAPER NUMBER

3626

DATE MAILED: 12/23/2010

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/748,477 | 12/30/2003 | Kay L. Grasso | CRNL107715 | 7079 |

TITLE OF INVENTION: COMPUTERIZED SYSTEM AND METHOD FOR GENERATING AN IMMUNIZATION SCHEDULE IN A HEALTHCARE ENVIRONMENT

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 03/23/2011 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
 or Fax **(571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

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Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

| |
|--------------------|
| (Depositor's name) |
| (Signature) |
| (Date) |

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| EXAMINER | ART UNIT | CLASS-SUBCLASS |
|-----------------|----------|----------------|
| LAM, ELIZA ANNE | 3626 | 705-002000 |

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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EXAMINER

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Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1284 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1284 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability**Application No.**

10/748,477

Examiner

Eliza Lam

Applicant(s)

GRASSO ET AL.

Art Unit

3626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/28/2010.
2. ☒ The allowed claim(s) is/are 1-7,26-29,46 and 51-57.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date ____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

/E. L./
Examiner, Art Unit 3626

/Robert Morgan/
Supervisory Patent Examiner, Art Unit 3626

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ashley Sturgeon on 12/10/10.

The application has been amended as follows:

1. (Previously Presented) A computer-implemented method in a computer system for preventing one or more immunizations from being administered to a person too early, the method comprising:

receiving from a clinician, utilizing a first computer process, a request for an immunization schedule for a person during a present clinical visit;

receiving from the clinician, utilizing a second computer process, an identification of an immunization to be administered to the person, wherein the identification of the immunization is input by the clinician during the present clinical visit with the person;

generating, utilizing a third computer process, a custom immunization schedule for the person, wherein the custom immunization schedule is based on at least one immunization administered to the person during at least one former clinical visit prior to the present clinical visit, the immunization identified from

the input by the clinician to be administered to the person during the present clinical visit, and a standard schedule of recommended immunizations;

in response to receiving the identification of the immunization to be administered during the present clinical visit, determining, utilizing a fourth computer process, whether it is too soon to administer the immunization, wherein the determination whether it is too soon to administer the immunization is based on the custom immunization schedule for the person;

based on a determination that it is not too soon to administer the immunization, displaying a notification that is it safe to administer the immunization during the present clinical visit;

based on a determination that it is too soon to administer the immunization, displaying a warning that the immunization is being administered too soon; and

updating the custom immunization schedule for the person in response to receiving an input regarding the immunization to be administered during the present clinical visit,

wherein the first, second, third and fourth computer processes are executed utilizing one or more computing devices.

2. (Previously Presented) The method of claim 1, further comprising:

upon determining that it is too soon to administer the immunization, determining it is still safe to administer the immunization.

3. (Previously Presented) The method of claim 2, further comprising:
based on a determination that it is still safe to administer the immunization, outputting information that it is safe to administer the immunization.
4. (Previously Presented) The method of claim 2, further comprising:
upon determining that it is too soon to administer the immunization, determining that it is not safe to administer the immunization; and
based on a determination that it is not safe to administer the immunization, outputting information that it is not safe to administer the immunization.
5. (Original) The method of claim 1, further comprising:
obtaining information regarding the safe timing of immunizations from a database.
6. (Original) The method of claim 5, further comprising:
obtaining information from an electronic medical record of the person stored within a comprehensive healthcare system.
7. (Original) The method of claim 6, further comprising:
utilizing the information from the electronic medical record of the person and the information regarding safe timing of immunizations to determine whether an immunization is being administered too soon.
- 8-25. (Canceled)

26. (Previously Presented) A computer system including one or more computer-readable storage media having computer-executable modules stored thereon for preventing one or more immunizations from being administered to a person too early, the computer-executable modules comprising:

a receiving module for receiving from a clinician an identification of an immunization to be administered to a person during a present clinical visit, wherein the identification of the immunization is received from the clinician during the present clinical visit;

a determining module for determining whether it is too soon to administer the immunization in response to receiving the identification of the immunization to be administered from the clinician during the present clinical visit, wherein determining whether it is too soon to administer the immunization includes accessing a custom immunization schedule for the person that was generated based on at least one immunization administered to the person during at least one former clinical visit prior to the present clinical visit, the immunization identified from the input by the clinician to be administered to the person during the present clinical visit, and a standard schedule of recommended immunizations;

a displaying module for displaying a warning that the immunization is being administered too soon or a notification that the immunization may be administered; and

an updating module for updating the custom immunization schedule for the person in response to receiving an input regarding the immunization to be administered during the present clinical visit.

27. (Original) The system of claim 26, further comprising:

a second determining module for determining whether it is still safe to administer the immunization even though it is too soon to administer the immunization.

28. (Original) The system of claim 27, wherein if it is safe to administer the immunization, outputting information that it is safe to administer the immunization.

29. (Original) The system of claim 27, wherein if it is not safe to administer the immunization, outputting information that it is not safe to administer the immunization.

30-45. (Canceled)

46. (Previously Presented) A computer-storage medium having computer-executable instructions for performing a method for preventing one or more immunizations from being administered to a person too early, the method comprising:

receiving from a clinician, a request for an immunization schedule for a person during a present clinical visit;

receiving from the clinician an identification of an immunization to be administered to the person, wherein the identification of the immunization is input by the clinician during the present clinical visit with the person;

generating a custom immunization schedule for the person, wherein the custom immunization schedule is based on at least one immunization administered to the person during at least one former clinical visit prior to the present clinical visit, the immunization identified from the input by the clinician to be administered to the person during the present clinical visit, and a standard schedule of recommended immunizations;

in response to receiving the identification of the immunization to be administered to the person during the present clinical visit, determining whether it is too soon to administer the immunization during the present clinical visit based on the custom immunization schedule;

based on a determination that it is too soon to administer the immunization, determining whether it is safe to administer the immunization too soon;

upon determining that it is not safe to administer the immunization too soon, displaying a warning indicating that the immunization is not safe to administer to the person wherein the warning is a first popup warning window;

upon determining that it is safe to administer the immunization too soon, notifying the clinician that it is safe to administer the immunization too soon;

based on a determination this it is not too soon to administer the immunization, determining whether the immunization will cause an adverse reaction to the person;

upon determining that the immunization will cause an adverse reaction, displaying a warning that the immunization will cause an adverse reaction via a second pop-up warning window;

upon determining that the immunization will not cause an adverse reaction, displaying a message that the immunization may be administered during the present clinical visit; and

updating the custom immunization schedule for the person in response to receiving an input regarding the immunization to be administered during the present clinical visit.

47-50. (Canceled)

51. (Currently Amended) The computer-readable storage medium of claim 46, further comprising:

obtaining healthcare information for the person from the person's electronic medical record.

52. (Currently Amended) The computer-readable storage medium of claim 46, further comprising:

obtaining information regarding adverse reactions and immunizations.

53. (Currently Amended) The computer-readable storage medium of claim 52, further comprising:

comparing the information regarding adverse reactions to the information for the person obtained from the person's electronic medical record.

54. (Currently Amended) The computer-readable storage medium of claim 53, wherein the information obtained from the person's electronic medical record includes medications being taken.

55. (Currently Amended) The computer-readable storage medium of claim 53, wherein the information obtained from the person's electronic medical record includes allergy information.

56. (Currently Amended) The computer-readable storage medium of claim 53, wherein the information obtained from the person's electronic medical record includes a medical condition that can cause adverse reactions to the immunization.

57. (Currently Amended) The computer-readable storage medium of claim 53, wherein the information obtained from the person's electronic medical record includes a genetic condition that predisposes the person to adverse reactions to the immunizations.

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance: The primary reasons for the allowance of claims 1-7, 26-29, 46, and 51-57 is the inclusion of the limitations in the claims, which are not found in the prior art references, of a computer implemented method, a computer system, and a computer storage medium that receives an identification of an immunization, generates a custom immunization schedule based on at least one immunization administered during at least one former visit, the immunization identified during the present visit, and a standard schedule, determining from the identified immunization if it is too soon to administer and either displaying a warning or notifying it is safe to administer, determining if the immunization will cause an adverse reaction and either displaying a warning or notifying it is safe to administer, and updating the schedule in response to an input regarding the immunization. This, along with further limitations set forth by the claims render the application allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eliza Lam whose telephone number is (571)270-7052. The examiner can normally be reached on Monday through Friday 8 am - 4 pm Eastern Standard Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Morgan can be reached on 571-272-6773. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. L./
Examiner, Art Unit 3626

/Robert Morgan/
Supervisory Patent Examiner, Art Unit 3626